

This document gives pertinent information concerning the reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) Permit listed below. This permit is being processed as a Minor, Industrial permit. The discharges result from bulk terminal operations. This permit action consists of updating the proposed effluent limits to reflect the current Virginia Water Quality Standards (effective January 6, 2011) and updating permit language as appropriate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards (WQS) of 9VAC25-260-00 et seq.

1. Facility Name and Mailing Address: Kinder Morgan Newington 1 Terminal
8200 Terminal Road
Newington, VA 22122
SIC Code : 4226 - Terminal for Hire
Facility Location: 8200 Terminal Road
Newington, VA 22122
County: Fairfax
Facility Contact Name: Mr. Richard Semcheski
Telephone Number: (703) 550-0408
Facility E-mail Address: Richard_Semcheski@kindermorgan.com
2. Permit No.: VA0001945
Expiration Date of previous permit: May 29, 2013
Other VPDES Permits associated with this facility: None
Other Permits associated with this facility: Air – Registration Number 700587 (Title V)
Hazardous Waste – VAD077797165
Petroleum – Registration Number 3016380
E2/E3/E4 Status: NA
3. Owner Name: Kinder Morgan Southeast Terminals, LLC
Owner Contact/Title: Patrick Davis
Telephone Number: (804) 743-5778
Owner E-mail Address: JPatrick_Davis@kindermorgan.com
4. Application Complete Date: December 7, 2012
Permit Drafted By: Susan Mackert
Date Drafted: May 17, 2013
Draft Permit Reviewed By: Alison Thompson
Date Reviewed: May 28, 2013
WPM Review By: Bryant Thomas
Date Reviewed: June 3, 2013
Public Comment Period : Start Date: June 27, 2013
End Date: July 26, 2013
5. Receiving Waters Information: Outfall 001 / Outfall 901*
Receiving Stream Name : UT, Accotink Creek**
Stream Code: 1aXIG
Drainage Area at Outfall: 0.036 square miles
River Mile: 0.35
Stream Basin: Potomac River
Subbasin: Potomac River
Section: 7
Stream Class: III
Special Standards: b (Not Applicable)
Waterbody ID: VAN-A15R
7Q10 Low Flow: 0 MGD
7Q10 High Flow: 0 MGD
1Q10 Low Flow: 0 MGD
1Q10 High Flow: 0 MGD
30Q10 Low Flow: 0 MGD
30Q10 High Flow: 0 MGD
Harmonic Mean Flow: 0 MGD
30Q5 Flow: 0 MGD

It is staff's best professional judgement that based on a drainage area of 5 square miles or less, critical flows will be equal to 0.

*Because Outfalls 001 and 901 are adjacent to one another and discharge to the same unnamed tributary to Accotink Creek, the drainage areas and river miles are assumed to be identical.

**UT – Unnamed Tributary

6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

<input checked="" type="checkbox"/> State Water Control Law	<input type="checkbox"/> EPA Guidelines
<input checked="" type="checkbox"/> Clean Water Act	<input checked="" type="checkbox"/> Water Quality Standards
<input checked="" type="checkbox"/> VPDES Permit Regulation	<input checked="" type="checkbox"/> Other - 9VAC25-120*
<input checked="" type="checkbox"/> EPA NPDES Regulation	

* General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests

7. Licensed Operator Requirements: Not Applicable

8. Reliability Class: Not Applicable

9. Permit Characterization:

<input checked="" type="checkbox"/> Private	<input checked="" type="checkbox"/> Effluent Limited	<input type="checkbox"/> Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	<input type="checkbox"/> Compliance Schedule Required
<input type="checkbox"/> State	<input checked="" type="checkbox"/> Whole Effluent Toxicity Program Required	<input type="checkbox"/> Interim Limits in Permit
<input type="checkbox"/> WTP	<input type="checkbox"/> Pretreatment Program Required	<input type="checkbox"/> Interim Limits in Other Document
<input type="checkbox"/> TMDL		

10. Wastewater Sources and Treatment Description:

The Kinder Morgan Newington 1 Terminal is a petroleum product distribution facility. Fuel products are received via the Plantation Pipeline, stored in above ground storage tanks (ASTs) located within the bermed area of the property, and distributed by truck to offsite retail stations. Jet fuel is provided to Washington Dulles and Reagan National Airports via underground pipelines. Ethanol and additives are also stored on site.

Oil-Water Separator

Potentially contaminated storm water and any process wastewater from the site are directed to the facility's oil-water separator (potential sources are described below). The oil-water separator has a design flow rate of 0.220 MGD and a capacity of 12,000 gallons. Any petroleum products removed from the separator are stored in an adjacent AST. The discharge from the oil-water separator flows over riprap into a storm water management pond with a design storage capacity of 0.6 million gallons.

There are two discharge pipes from the storm water management pond. The 18 inch "northern" pipe is designated as Outfall 001 which discharges to an unnamed tributary to Accotink Creek. It is staff's best professional judgement that with this reissuance the second, or "southern" pipe, be recognized within the permit and authorized as a point source discharge. It is unlikely that there would be a discharge from this outfall. However, if there were a discharge it would be comprised of storm water overflow from the storm water management pond due to a significant rain event. As such, this outfall shall be designated as Outfall 901 and be deemed an emergency storm water outfall. Any discharge would be to the same unnamed tributary to Accotink Creek as Outfall 001.

AST Area

The ASTs are located within three separate diked areas. Storm water collects via gravity to the lowest point and is visually inspected prior to being pumped to the oil-water separator. Inline hydrocarbon detectors are utilized; the sump pumps will shut off automatically if hydrocarbons are detected in the storm water. The sump pumps are not used while the facility is receiving product.

Loading Rack

The rack has eight loading bays with an area for ethanol fueling recently added. Wash water and any spills drain to the oil-water separator. The loading rack is equipped with a fire suppression system. This system requires regular testing, but the foam is omitted for the tests. Water generated from the testing is piped to the oil-water separator.

Truck Washing

In the past a contractor has been employed to wash the transport trucks. Wash water was contained by a boom, collected by a vacuum truck, and hauled off site for treatment and disposal. However, it is now against Kinder Morgan's policy to conduct vehicle washing on the property. Vehicle washing is to be conducted at offsite facilities.

Paved Areas

Parking lots and vehicle traffic areas are all paved. Storm water runoff is piped to the oil-water separator.

Maintenance Shop

A maintenance shop is located on site and is leased to a tenant of Kinder Morgan. Open floor drains in the maintenance shop are connected to the oil-water separator. A locked sump pump moves water to the oil-water separator when necessary. Movement of water is only authorized after inspection by Kinder Morgan staff.

Hydrostatic Test Waters (Internal Outfall 102)

This outfall has been included in previous permits and was designated for hydrostatic testing as needed. A review of Discharge Monitoring Report (DMR) data indicates that hydrostatic testing last took place in November 2005 (Tank #4), April 2006 (Tank #16), and November 2007 (Tank #16). Hydrostatic testing discharges would receive treatment from the oil-water separator prior to entering the storm water management pond.

The permittee has requested that this outfall be removed with this reissuance. If a hydrostatic test is required, the permittee will obtain coverage under *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation and Hydrostatic Tests* (9VAC25-120).

See Attachment 1 for the National Pollutant Discharge Elimination System (NPDES) Permit Rating Worksheet. See Attachment 2 for a facility schematic/diagram.

TABLE 1 – Outfall Description

Outfall Number	Discharge Sources	Treatment	Average Flow	Outfall Latitude and Longitude
001	Industrial Storm Water / Hydrostatic Test Water*	Separation and Settling	0.176 MGD	38° 44' 09" N 77° 11' 35" W
102	Hydrostatic Test Water	Separation	0.006 MGD	38° 44' 09" N 77° 11' 35" W
	Outfall 102 removed with this reissuance. See Section 10 above of the Fact Sheet.			
901	Industrial Storm Water	Settling	0.000 MGD	38° 44' 09" N 77° 11' 37" W
	Outfall 901 added with this reissuance. See Section 10 above of the Fact Sheet.			
* While hydrostatic testing discharges will now be covered under a separate permit, the discharge from Outfall 001 may contain hydrostatic test water as a component.				
See Attachment 3 for (Fort Belvoir, DEQ #193B) topographic map.				

11. Solids Treatment and Disposal Methods:

The Kinder Morgan Newington 1 Terminal is an existing industrial facility that does not treat domestic sewage and does not produce sewage sludge.

12. Discharges and Monitoring Stations in Vicinity of Discharge within Waterbody VAN-A15R:

TABLE 2	
1aACO002.50	DEQ ambient monitoring station located at Route 1.
1aACO004.84	DEQ ambient monitoring station located at Telegraph Road (Route 611).
1aACO004.84	DEQ fish tissue/sediment station located at Route 611.
1aACO006.10	DEQ ambient monitoring station located on Accotink Creek at the Alban Road (Route 790) bridge crossing approximately 1.12 river miles downstream from Outfall 001.
1aACO009.14	DEQ biological monitoring station located upstream of Route 636 and Fairfax County Parkway.
VA0001872	Joint Basin Corporation – Fairfax Terminal Complex (UT to Daniels Run)
VA0001988	Kinder Morgan Southeast Terminals – Newington 2 (UT to Accotink Creek)
VA0002283	Motiva Enterprises, LLC – Fairfax (Crook Branch)
VAG110046	Virginia Concrete Company, Incorporated – Newington Plant 1 (UT to Accotink Creek)
VAG110069	Virginia Concrete Company, Incorporated – Mid Atlantic Materials Newington (UT to Accotink Creek)
VAG250126	AT&T Oakton Office Park (Accotink Creek)
VAG406519	Margaret Bardwell Residence (UT to Accotink Creek)
VAR051042	SICPA Securlink Corporation (Accotink Creek)
VAR051047	Fairfax County Connector Bus Yard (Long Branch)
VAR051066	U.S. Postal Service – Merrifield Vehicle Maintenance (UT to Long Branch)
VAR051100	Shenandoah's Pride Dairy (Flag Run)
VAR051565	Rolling Frito Lay Sales, LP – South Potomac DC (Accotink Creek)
VAR051719	National Asphalt Paving Corporation – Fairfax (Accotink Creek)
VAR051770	Fairfax County – Jermantown Maintenance Facility (UT to Accotink Creek)
VAR051772	Fairfax County DVS – Alban Maintenance Facility (Field Lark Branch)
VAR051795	HD Supply - White Cap (Accotink Creek)
VAR051863	United Parcel Service – Newington (Accotink Creek)

13. **Material Storage:**

TABLE 3 - Material Storage		
Materials Description	Volume Stored (Capacity)	Spill/Storm Water Prevention Measures
Gasoline (Tank #1)	67,469 barrels	Bermed Containment Area
Gasoline (Tank #2)	60,454 barrels	Bermed Containment Area
Gasoline (Tank #3)	42,995 barrels	Bermed Containment Area
Gasoline (Tank #4)	97,366 barrels	Bermed Containment Area
Gasoline (Tank #5)	67,205 barrels	Bermed Containment Area
Gasoline (Tank #6)	66,881 barrels	Bermed Containment Area
Jet Fuel (Tank #7)	121,983 barrels	Bermed Containment Area
Ultra-Low Sulfur Diesel (Tank #11)	13,629 barrels	Bermed Containment Area
Interface (Tank #12)	13,643 barrels	Bermed Containment Area
Jet Fuel (Tank #14)	33,127 barrels	Bermed Containment Area
Ultra-Low Sulfur Diesel (Tank #15)	33,089 barrels	Bermed Containment Area
Jet Fuel (Tank #16)	67,831 barrels	Bermed Containment Area
Ethanol (Tank #17)	41,527 barrels	Bermed Containment Area
Ultra-Low Sulfur Diesel (Tank #18)	43,338 barrels	Bermed Containment Area
Jet Fuel (Tank #19)	82,376 barrels	Bermed Containment Area
Gasoline Additive (Tank #23)	19,302 gallons	Bermed Containment Area
Empty (Tank #24)	9,544 gallons	Bermed Containment Area
Separator Holding (Tank #25)	8,000 gallons	Bermed Containment Area
Heating Oil (Tank #28)	800 gallons	Bermed Containment Area
Distillate (Tank #29)	232 gallons	Bermed Containment Area
Vapor Recovery Unit Condensate (Tank #30)	2,000 gallons	Bermed Containment Area
Diesel Additive (Tank #31)	8,424 gallons	Bermed Containment Area
Diesel Additive (Tank #32)	2,061 gallons	Bermed Containment Area
Red Dye Additive (Tank #33)	650 gallons	Bermed Containment Area

14. **Site Inspection:**

Performed by Susan Mackert and Doug Fraiser on April 10, 2013. The site visit memo can be found as Attachment 4.

15. Receiving Stream Water Quality and Water Quality Standards:**a) Ambient Water Quality Data**

This facility discharges to an Unnamed Tributary to Accotink Creek (1aXIG). There is no monitoring data for the Unnamed Tributary. The nearest downstream DEQ monitoring station with ambient data is Station 1aACO006.10, located on Accotink Creek at the Alban Road (Route 790) bridge crossing. Station 1aACO006.10 is located approximately 1.12 rivermiles downstream from Outfall 001. The following is a monitoring summary for this segment of Accotink Creek, as taken from the Draft 2012 Integrated Assessment*:

Class III, Section 7, special standard "b".

DEQ ambient water quality monitoring stations 1aACO002.50, at Route 1, 1aACO004.84, at Route 611 (Telegraph Road), and 1aACO006.10, at Route 790, and biological monitoring station 1aACO009.14, upstream of Route 636 and Fairfax County Parkway.

The fish consumption use is assessed as not supporting due to data collected previously at DEQ's fish tissue/sediment station 1aACO004.86, at Route 611. Fish tissue data revealed exceedances of the water quality criterion based tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue were recorded in tissue from 3 species of fish (American eel, redbreast sunfish and rainbow trout) in 2004. Also, at station 1aACO002.50 in 2005, Semi-Permeable Membrane Device (SMPD) data revealed an exceedance of the human health criteria of 0.64 parts per billion (ppb) polychlorinated biphenyls (PCBs), which is noted by an observed effect. Additionally, exceedances of the water quality criterion based tissue value (TV) for heptachlor epoxide and dieldrin were also noted by observed effects for the 2008 assessment. These observed effects will remain.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use. A bacteria TMDL has been completed and EPA approved for this segment.

Biological monitoring finds benthic macroinvertebrate impairments, resulting in an impaired classification for the aquatic life use.

The recreation and wildlife uses are considered fully supporting.

*Virginia's Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.

b) 303(d) Listed Stream Segments and Total Maximum Daily Loads (TMDLs)

TABLE 4 -- 303(d) Impairment and TMDL Information (Downstream)							
<i>Impairment Information in the Draft 2012 Integrated Report*</i>							
Waterbody Name	Impaired Use	Cause	Distance From Outfall	TMDL completed	WLA**	Basis for WLA	TMDL Schedule
Accotink Creek	Fish Consumption	PCBs	0.35 miles	No	NA	NA	2022
	Recreation	<i>E. coli</i>	0.35 miles	Yes	No	NA	TMDL Completed in 2008
	Aquatic Life: Benthic Macroinvertebrates	TBD***	0.35 miles	No	NA	NA	TBD

*Virginia's Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently being finalized and prepared for release.

**WLA = Wasteload Allocation

***TBD = To be determined

The full planning statement is found in Attachment 5.

c) Receiving Stream Water Quality Criteria

Part IX of 9VAC25-260(360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, UT to Accotink Creek, is located within Section 7 of the Potomac River Basin, and classified as a Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream.

Ammonia:

The fresh water, aquatic life Water Quality Criteria for Ammonia are dependent on the instream temperature and pH. The 90th percentile temperature and pH values are used because they best represent the critical design conditions of the receiving stream.

The 7Q10 and 1Q10 of the receiving stream are 0.0 MGD. In cases such as this, effluent pH and temperature data may be used to establish the ammonia water quality standard. The 90th percentile pH was derived from Outfall 001 DMR submissions dated October 2008 to April 2013 and was determined to be 8.52 S.U. (see Attachment 6). Because the facility is not required to monitor effluent temperature at the outfall, a default value of 25°C was used. The ammonia water quality standards calculations are shown in Attachment 6.

Ammonia, as N, is not a parameter of concern due to the fact the discharge is industrial in nature. As such, there is no reasonable potential to exceed the ammonia criteria. It is staff's best professional judgment that ammonia limits need not be developed for this discharge.

Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream's hardness (expressed as mg/L calcium carbonate). The 7Q10 of the receiving stream is zero, no ambient data is available, and no effluent data is available for Outfall 001. Staff guidance suggests using a default hardness value of 50 mg/L CaCO₃ for streams east of the Blue Ridge. The hardness-dependent metals criteria in Attachment 6 are based on this default value.

d) Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9VAC25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, UT to Accotink Creek, is located within Section 7 of the Potomac River Basin. This section has been designated with a special standard of "b".

Special Standard "b" (Potomac Embayment Standards) established effluent standards for all sewage plants discharging into Potomac River embayments and for expansions of existing plants discharging into non-tidal tributaries of these embayments. 9VAC25-415, Policy for the Potomac Embayments controls point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 Bridge in King George County. The regulation sets effluent limits for BOD₅, total suspended solids, phosphorus and ammonia to protect the water quality of these high profile waterbodies.

The Potomac Embayment Standards are not applicable since industrial discharges were explicitly exempt, where BOD₅ and nutrients are not primary pollutants of concern (9VAC25-415-30.D).

16. Antidegradation (9VAC25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 based on the downstream impairments noted in Section 15.b. and the surrounding, highly urbanized area. It is staff's best professional judgment that such streams are Tier 1. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a) Effluent Screening:

Effluent data obtained from the permit application and Discharge Monitoring Report (DMR) forms from July 2008 to January 2013 has been reviewed and determined to be suitable for evaluation.

b) Mixing Zones and Wasteload Allocations (WLAs):

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f)(Q_s)] - [(C_s)(f)(Q_s)]}{Q_e}$$

Where:

WLA	=	Wasteload allocation
C _o	=	In-stream water quality criteria
Q _e	=	Design flow
Q _s	=	Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; 30Q10 for ammonia criteria; harmonic mean for carcinogen-human health criteria; and 30Q5 for non-carcinogen human health criteria)
f	=	Decimal fraction of critical flow
C _s	=	Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o.

c) Effluent Limitations and Monitoring - Toxic Pollutants

9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9VAC25-31-230.D requires that monthly and weekly average limitations be imposed for continuous discharges from Publicly Owned Treatment Works (POTW) and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

1. Outfall 001

Naphthalene:

Naphthalene has been monitored by the facility at Internal Outfall 102 (hydrostatic testing discharge). Based on the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq., the analysis of Naphthalene is required for the discharge of water contaminated with petroleum products other than gasoline.

Naphthalene is a component of gasoline and non-gasoline petroleum products; however, its relative concentration is higher in products such as diesel and kerosene than in gasoline. The Kinder Morgan Newington 1 Terminal stores and distributes diesel. As such, it is staff's best professional judgement that effluent limitations for Naphthalene be implemented at Outfall 001.

The proposed effluent limitation of 8.9 µg/L is a water quality-based limit and reflects the limit found within the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq., effective February 26, 2013. A semi-annual monitoring frequency (1/6M) is proposed.

Benzene, Toluene, Ethylbenzene, Xylenes (BTEX):

BTEX has been monitored by the facility at Internal Outfall 102 (hydrostatic testing discharge). Based on the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq., the analysis of BTEX is required for the discharge of water contaminated with gasoline.

BTEX is used as an indicator of the compounds most likely found within gasoline. The Kinder Morgan Newington 1 Terminal stores and distributes gasoline. As such, it is staff's best professional judgement that effluent limitations for BTEX be implemented at Outfall 001.

The proposed effluent limitations shown below in Table 5 reflect the limits found within the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq. The limits are set at what is believed to be safe concentrations for the protection of beneficial uses including the growth and propagation of aquatic organisms inhabiting surface waters that receive the discharge. The limits assume zero dilution of the effluent by the receiving waters so that they can be applied without regard to effluent or receiving water flows. They are based on information provided in EPA criteria documents for priority pollutants, EPA toxicity databases and conservative application factors. A semi-annual monitoring frequency (1/6M) is proposed.

TABLE 5 – BTEX Limitations	
Parameter	Effluent Limitation
Benzene	12 µg/L
Toluene	43 µg/L
Ethylbenzene	4.3 µg/L
Total Xylenes	33 µg/L

Ethanol:

Ethanol is a primary product used to meet the standards for the Wintertime Oxygenated Fuels Program and Phase 1 and Phase 2 of the Reformulated Gasoline Program (RFG). The Kinder Morgan Newington 1 Terminal does maintain an ethanol off loading area (see Attachment 4).

Ethanol will not persist in water because it undergoes fairly rapid biodegradation. Thus, ethanol is a short-lived compound in surface waters and subsurface aquifers. In 2006, many RFG marketers in Virginia began being supplied with gasoline containing up to 10% ethanol. The *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq. states that effluent limits for ethanol are not needed for discharges of waters associated with petroleum products containing up to 10% ethanol. As such, it is staff's best professional judgement that monitoring and effluent limitations are not warranted for ethanol. The facility shall utilize Best Management Practices to ensure there is no storm water contamination from the ethanol off loading area that could impact State waters.

d) Effluent Limitations and Monitoring – Conventional and Non-Conventional Pollutants

1. Outfall 001

Total Petroleum Hydrocarbons:

The technology-based limit of 15 mg/L shall be carried forward with this reissuance. The limit is based on the ability of simple oil-water separator technology to recover free product from water. Wastewater discharged without a visible sheen is generally expected to meet this effluent limitation. The quarterly monitoring frequency (1/3M) shall also be carried forward.

Total Suspended Solids:

The limit of 60 mg/L shall be carried forward with this reissuance. The limit is included to ensure proper operation and maintenance of the storm water management pond. The limit was derived from requirements at other industrial facilities providing sedimentation of storm water runoff. The quarterly monitoring frequency (1/3M) shall also be carried forward.

pH:

The minimum limit of 6.0 S.U. and the maximum limit of 9.0 S.U. shall be carried forward with this reissuance. Effluent pH limitations are set at the water quality criteria. The quarterly monitoring frequency (1/3M) shall also be carried forward.

e) Effluent Monitoring - Storm Water Only Pollutants

1. Outfall 901

As previously mentioned in Section 10 of the Fact Sheet, it is staff's best professional judgement that with this reissuance an emergency storm water outfall be recognized within the permit and authorized as a point source discharge. It is unlikely that there would be a discharge from this outfall. However, if there were a discharge it would be comprised of storm water overflow from the storm water management pond due to a significant rain event.

The facility shall monitor the discharge from Outfall 901 for the parameters found in Section 19b. of the Fact Sheet. Monitoring shall be conducted once per year contingent upon a discharge from the storm water management pond.

f) Effluent Limitations and Monitoring Summary

The effluent limitations and monitoring are presented in the following table. Limits were established for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), naphthalene, total suspended solids, and pH. Monitoring for whole effluent toxicity is also included.

Sample type and frequency are in accordance with the recommendations in the VPDES Permit Manual.

18. Antibacksliding:

The backsliding proposed with this reissuance conforms to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, 9VAC25-31-220.L., and 40 CFR 122.44. The permittee requested that Outfall 102 (hydrostatic testing) be removed with this reissuance and as such, all limitations associated with this outfall have been removed. This facility has not conducted a hydrostatic test during the last permit term. A review of DMR data indicates that hydrostatic testing last took place in November 2005 (Tank #4), April 2006 (Tank #16), and November 2007 (Tank #16). Any future hydrostatic tests conducted at this facility shall be covered under the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests*, 9VAC25-120 et seq. The limitations set forth in the General Permit are at least as stringent as those that would be found within this permit.

19a. Effluent Limitations/Monitoring Requirements: Outfall 001 (Storm Water and Hydrostatic Test Water*)

*While hydrostatic testing discharges will now be covered under a separate permit, the discharge from Outfall 001 may contain hydrostatic test water as a component.

Average flow: 0.176 MGD

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/3M	Estimate
pH (S.U.)	2	NA	NA	6.0 S.U.	9.0 S.U.	1/3M	Grab
Total Suspended Solids (TSS)	1	NA	NA	NA	60 mg/L	1/3M	Grab
Total Petroleum Hydrocarbons (TPH)*	1	NA	NA	NA	15 mg/L	1/3M	Grab
Naphthalene	2,3	NA	NA	NA	8.9 µg/L	1/6M	Grab
Benzene	3	NA	NA	NA	12 µg/L	1/6M	Grab
Toluene	3	NA	NA	NA	43 µg/L	1/6M	Grab
Ethylbenzene	3	NA	NA	NA	4.3 µg/L	1/6M	Grab
Total Xylenes	3	NA	NA	NA	33 µg/L	1/6M	Grab
Acute Whole Effluent Toxicity – <i>C. dubia</i> (NOAEC)	1	NA	NA	NA	NL (%)	1/YR	Grab

The basis for the limitations codes are:

1. Best Professional Judgement
2. Water Quality Standards
3. 9VAC25-120

MGD = Million gallons per day.

NA = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

1/3M = Once every three months.

1/6M = Once every six months.

1/YR = Once every twelve months.

1/3M = The quarterly monitoring periods shall be January 1 - March 31, April 1 - June 30, July 1 - September 30 and October 1 - December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (April 10, July 10, October 10 and January 10, respectively).

1/6M = The semi-annual monitoring period shall be January 1 - June 30 and July 1 - December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period (July 10 and January 10, respectively).

1/YR = The annual monitoring period shall be January 1 through December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

Total Petroleum Hydrocarbon Requirement:

* Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

19b. Effluent Limitations/Monitoring Requirements: Outfall 901 (Emergency Storm Water Overflow)

Average flow: 0.0 MGD

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

PARAMETER	BASIS FOR LIMITS/MONITORING	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average	Daily Maximum	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	Contingent	Estimate
pH (S.U.)	2	NA	NA	6.0 S.U.	9.0 S.U.	Contingent	Grab
Total Suspended Solids	1	NA	NA	NA	NL (mg/L)	Contingent	Grab
Total Petroleum Hydrocarbons (TPH)*	1	NA	NA	NA	NL (mg/L)	Contingent	Grab
Naphthalene	1,3	NA	NA	NA	NL (µg/L)	Contingent	Grab
Benzene	1,3	NA	NA	NA	NL (µg/L)	Contingent	Grab
Toluene	1,3	NA	NA	NA	NL (µg/L)	Contingent	Grab
Ethylbenzene	1,3	NA	NA	NA	NL (µg/L)	Contingent	Grab
Total Xylenes	1,3	NA	NA	NA	NL (µg/L)	Contingent	Grab

The basis for the limitations codes are:

- | | |
|--------------------------------|------------------------------------|
| 1. Best Professional Judgement | MGD = Million gallons per day. |
| 2. Water Quality Standards | NA = Not applicable. |
| 3. 9VAC25-120 | NL = No limit; monitor and report. |
| | S.U. = Standard units. |

Total Petroleum Hydrocarbon Requirement:

* Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics or TPH-GRO and TPH-DRO to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.

Contingent = Monitoring of this outfall is only required if a discharge occurs through this discharge pipe. The reporting frequency shall be on an annual basis (1/YR). The annual monitoring period shall be January 1 through December 31. The DMR shall be submitted no later than the 10th day of the month following the monitoring period.

Estimate = Reported flow is to be based on the technical evaluation of the sources contributing to the discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

20. Other Permit Requirements:

- a) Part I.B. of the permit contains quantification levels and compliance reporting instructions. 9VAC25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9VAC25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.
- b) Permit Section Part I.C., details the requirements for Whole Effluent Toxicity (WET) Program. The VPDES Permit Regulation at 9VAC25-31-210 requires monitoring and 9VAC25-31-220.I, requires limitations in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act. A WET Program is imposed for municipal facilities with a design rate >1.0 MGD, with an approved pretreatment program or required to develop a pretreatment program, or those determined by the Board based on effluent variability, compliance history, IWC, and receiving stream characteristics. Bulk terminals necessitate the inclusion of a WET Program.
- c) Permit Section Part I.D and Part I.E detail the requirements of a Storm Water Management Plan. Industrial storm water discharges may contain pollutants in quantities that could adversely affect water quality. Storm water discharges which are discharged through a conveyance or outfall are considered point sources and require coverage by a VPDES permit. The primary method to reduce or eliminate pollutants in storm water discharges from an industrial facility is through the use of best management practices (BMPs). Storm Water Management Plan requirements are derived from the VPDES General Permit for Storm Water Discharges Associated with Industrial Activity, 9VAC25-151 et seq.

21. Other Special Conditions:

- a) O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; VPDES Permit Regulation, 9VAC25-31-190.E. Within 90 days of the effective date of this permit, the permittee shall submit for approval an Operations and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO). Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- b) Notification Levels. The permittee shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter;
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.
 - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
 - (4) The level established by the Board.

(4) The level established by the Board.

- c) Materials Handling/Storage. 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorize the Board to regulate the discharge of industrial waste or other waste.
- d) Water Quality Criteria Reopener. The VPDES Permit Regulation at 9VAC25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
- e) Water Quality Criteria Monitoring. State Water Control Law §62.1-44.21 authorizes the Board to request information needed to determine the discharge's impact on State waters. States are required to review data on discharges to identify actual or potential toxicity problems, or the attainment of water quality goals, according to 40 CFR Part 131, Water Quality Standards, subpart 131.11. To ensure that water quality criteria are maintained, the permittee is required to analyze the facility's effluent for the substances noted in Attachment A of this VPDES permit.
- f) Oil Storage Ground Water Monitoring Reopener. As this facility currently manages ground water in accordance with 9VAC25-90-10 et seq., Oil Discharge Contingency Plans and Administration Fees for Approval, this permit does not presently impose ground water monitoring requirements. However, this permit may be modified or alternately revoked and reissued to include ground water monitoring not required by the ODCP regulation.
- g) No Discharge of Detergents, Surfactants, or Solvents to the Oil/Water Separators. This special condition is necessary to ensure that the oil/water separators' performance is not impacted by compounds designed to emulsify oil. Detergents, surfactants, and some other solvents will prohibit oil recovery by physical means.
- h) TMDL Reopener. This special condition is to allow the permit to reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

22. Changes to the Permit from the Previously Issued Permit:

a) Special Conditions:

1. The Hydrostatic Testing condition was removed with this reissuance. The permittee shall obtain coverage under the *General VPDES Permit for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests* (9VAC25-120) if hydrostatic testing is required.
2. The O&M special condition has been revised to be consistent with current agency practice.

b) Monitoring and Effluent Limitations:

1. Naphthalene limitations were added to Outfall 001 to reflect those limitations found within 9VAC25-120 for the discharge of water contaminated with petroleum products other than gasoline.
2. BTEX limitations were added to Outfall 001 to reflect those limitations found within 9VAC25-120 for the discharge of water contaminated with gasoline.
3. The following limitations were revised to reflect the current limits found within 9VAC25-120:
 - Benzene was changed from 50 µg/L to 12 µg/L
 - Toluene was changed from 175 µg/L to 43 µg/L
 - Ethylbenzene was changed from 320 µg/L to 4.3 µg/L
 - Naphthalene was changed from 10 µg/L to 8.9 µg/L
4. Outfall 102, and all required monitoring and effluent limits, was removed from this permit as hydrostatic testing discharges shall be covered under the *General VPDES Permit for Discharges from Petroleum*

Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests (9VAC25-120).

5. Outfall 901 has been added to this permit to address emergency storm water overflows from the storm water management pond.
 6. The TPH footnote now specifies that both TPH-GRO and TPH-DRO are to be measured to calculate TPH.
- c) Other:
1. The EPA checklist, found as an attachment to the Fact Sheet, is no longer required.
 2. Storm water monitoring requirements have been updated to remove the requirement that samples be collected in response to a qualifying rain event as well as the requirement for quarterly visual examinations of storm water quality as the discharge is valved and therefore not rain dependent.
 3. Part II.A (Monitoring) of the permit has been updated to incorporate the Virginia Environmental Laboratory Accreditation Program (VELAP) requirements for laboratory analysis.

23. Variances/Alternate Limits or Conditions: Not Applicable

24. Public Notice Information:

First Public Notice Date: June 26, 2013

Second Public Notice Date: July 3, 2013

Public Notice Information is required by 9VAC25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3853, susan.mackert@deq.virginia.gov. See Attachment 7 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer and of all persons represented by the commenter/requester, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit. Requests for public hearings shall state 1) the reason why a hearing is requested; 2) a brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit; and 3) specific references, where possible, to terms and conditions of the permit with suggested revisions. Following the comment period, the Board will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given. The public may request an electronic copy of the draft permit and fact sheet or review the draft permit and application at the DEQ Northern Regional Office by appointment.

25. Additional Comments:

Previous Board Action(s): None

Staff Comments: Reissuance of this permit was delayed based on staff's best professional judgement to await the outcome of the Accotink Creek TMDL litigation.

Public Comment: No comments were received during the public notice.

Fact Sheet Attachments – Table of Contents

Kinder Morgan Newington 1 Terminal VA0001945

2013 Reissuance

Attachment 1	Industrial Permit Rating Worksheet
Attachment 2	Facility Flow Diagram
Attachment 3	Topographic Map
Attachment 4	Site Visit Memorandum
Attachment 5	Planning Statement
Attachment 6	Wasteload Allocation Analysis and Supporting Documentation
Attachment 7	Public Notice

NPDES PERMIT RATING WORK SHEET

VPDES NO. : VA0001945

- ☒ Regular Addition
☐ Discretionary Addition
☐ Score change, but no status Change
☐ Deletion

Facility Name: Kinder Morgan – Newington 1 Terminal

City / County: Newington / Fairfax

Receiving Water: UT, Accotink Creek

Waterbody ID: VAN-A15R

Is this facility a steam electric power plant (sic =4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
 2. A nuclear power Plant
 3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

- ☐ YES; score is 700 (stop here)
☒ NO; (continue)

☐ Yes; score is 600 (stop here) ☒ NO; (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: Primary Sic Code: 5171 Other Sic Codes:

Industrial Subcategory Code: 000 (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	15	<input type="checkbox"/> 7.	7	35
<input type="checkbox"/> 1.	1	5	<input type="checkbox"/> 4.	4	20	<input checked="" type="checkbox"/> 8.	8	40
<input type="checkbox"/> 2.	2	10	<input type="checkbox"/> 5.	5	25	<input type="checkbox"/> 9.	9	45
			<input type="checkbox"/> 6.	6	30	<input type="checkbox"/> 10.	10	50

Code Number Checked: 8

Total Points Factor 1: 40

FACTOR 2: Flow/Stream Flow Volume (Complete either Section A or Section B; check only one)

Section A – Wastewater Flow Only considered

Wastewater Type (see Instructions)	Code	Points
Type I: Flow < 5 MGD	<input type="checkbox"/> 11	0
Flow 5 to 10 MGD	<input type="checkbox"/> 12	10
Flow > 10 to 50 MGD	<input type="checkbox"/> 13	20
Flow > 50 MGD	<input type="checkbox"/> 14	30
Type II: Flow < 1 MGD	<input checked="" type="checkbox"/> 21	10
Flow 1 to 5 MGD	<input type="checkbox"/> 22	20
Flow > 5 to 10 MGD	<input type="checkbox"/> 23	30
Flow > 10 MGD	<input type="checkbox"/> 24	50
Type III: Flow < 1 MGD	<input type="checkbox"/> 31	0
Flow 1 to 5 MGD	<input type="checkbox"/> 32	10
Flow > 5 to 10 MGD	<input type="checkbox"/> 33	20
Flow > 10 MGD	<input type="checkbox"/> 34	30

Section B – Wastewater and Stream Flow Considered

Wastewater Type (see Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow	Code	Points
Type I/III:	< 10 %	<input type="checkbox"/> 41	0
	10 % to < 50 %	<input type="checkbox"/> 42	10
	> 50 %	<input type="checkbox"/> 43	20
Type II:	< 10 %	<input type="checkbox"/> 51	0
	10 % to < 50 %	<input type="checkbox"/> 52	20
	> 50 %	<input type="checkbox"/> 53	30

Code Checked from Section A or B: 21

Total Points Factor 2: 10

NPDES PERMIT RATING WORK SHEET

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutants: (check one) ☐ BOD ☐ COD ☐ Other: _____

Permit Limits: (check one)

- ☐ < 100 lbs/day
☐ 100 to 1000 lbs/day
☐ > 1000 to 3000 lbs/day
☐ > 3000 lbs/day

Code	Points
1	0
2	5
3	15
4	20

Code Number Checked: NAPoints Scored: 0

B. Total Suspended Solids (TSS)

Permit Limits: (check one)

- ☒ < 100 lbs/day
☐ 100 to 1000 lbs/day
☐ > 1000 to 5000 lbs/day
☐ > 5000 lbs/day

Code	Points
1	0
2	5
3	15
4	20

Code Number Checked: 1Points Scored: 0C. Nitrogen Pollutants: (check one) ☐ Ammonia ☐ Other: _____

Permit Limits: (check one)

- ☐ Nitrogen Equivalent
☐ < 300 lbs/day
☐ 300 to 1000 lbs/day
☐ > 1000 to 3000 lbs/day
☐ > 3000 lbs/day

Code	Points
1	0
2	5
3	15
4	20

Code Number Checked: NAPoints Scored: 0Total Points Factor 3: 0**FACTOR 4: Public Health Impact**

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this include any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above reference supply.

☐ YES; (If yes, check toxicity potential number below)☒ NO; (If no, go to Factor 5)

Determine the *Human Health* potential from Appendix A. Use the same SIC doe and subcategory reference as in Factor 1. (Be sure to use the *Human Health* toxicity group column – check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
<input type="checkbox"/> No process waste streams	0	0	<input type="checkbox"/> 3.	3	0	<input type="checkbox"/> 7.	7	15
<input type="checkbox"/> 1.	1	0	<input type="checkbox"/> 4.	4	0	<input type="checkbox"/> 8.	8	20
<input type="checkbox"/> 2.	2	0	<input type="checkbox"/> 5.	5	5	<input type="checkbox"/> 9.	9	25
			<input type="checkbox"/> 6.	6	10	<input type="checkbox"/> 10.	10	30

Code Number Checked: NATotal Points Factor 4: 0

NPDES PERMIT RATING WORK SHEET

FACTOR 5: Water Quality Factors

- A. Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-base federal effluent guidelines, or technology-base state effluent guidelines), or has a wasteload allocation been to the discharge

	Code	Points
<input checked="" type="checkbox"/> YES	1	10
<input type="checkbox"/> NO	2	0

- B. Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?

	Code	Points
<input checked="" type="checkbox"/> YES	1	0
<input type="checkbox"/> NO	2	5

- C. Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?

	Code	Points
<input type="checkbox"/> YES	1	10
<input checked="" type="checkbox"/> NO	2	0

Code Number Checked: A 1 B 1 C 2
 Points Factor 5: A 10 + B 0 + C 0 = 10

FACTOR 6: Proximity to Near Coastal Waters

- A. Base Score: Enter flow code here (from factor 2) _____

Check appropriate facility HPRI code (from PCS):

HPRI#	Code	HPRI Score
<input type="checkbox"/> 1	1	20
<input type="checkbox"/> 2	2	0
<input type="checkbox"/> 3	3	30
<input checked="" type="checkbox"/> 4	4	0
<input type="checkbox"/> 5	5	20

HPRI code checked: 4

Base Score (HPRI Score): 0 X (Multiplication Factor) 0.1 = 0

Enter the multiplication factor that corresponds to the flow code: _____

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

- B. Additional Points – NEP Program

For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

Code	Points	NA
<input type="checkbox"/> 1	10	
<input type="checkbox"/> 2	0	

- C. Additional Points – Great Lakes Area of Concern

For a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 area's of concern (see instructions)?

Code	Points	NA
<input type="checkbox"/> 1	10	
<input type="checkbox"/> 2	0	

Code Number Checked: A 4 B NA C NA
 Points Factor 6: A 0 + B 0 + C 0 = 0

NPDES PERMIT RATING WORK SHEET

SCORE SUMMARY

<u>Factor</u>	<u>Description</u>	<u>Total Points</u>
1	Toxic Pollutant Potential	40
2	Flows / Streamflow Volume	10
3	Conventional Pollutants	0
4	Public Health Impacts	0
5	Water Quality Factors	10
6	Proximity to Near Coastal Waters	0
TOTAL (Factors 1 through 6)		60

S1. Is the total score equal to or greater than 80 ☐ YES; (Facility is a Major) ☒ NO

S2. If the answer to the above questions is no, would you like this facility to be discretionary major?

☒ NO

☐ YES; (Add 500 points to the above score and provide reason below:

Reason: _____

NEW SCORE : 60
OLD SCORE : 60

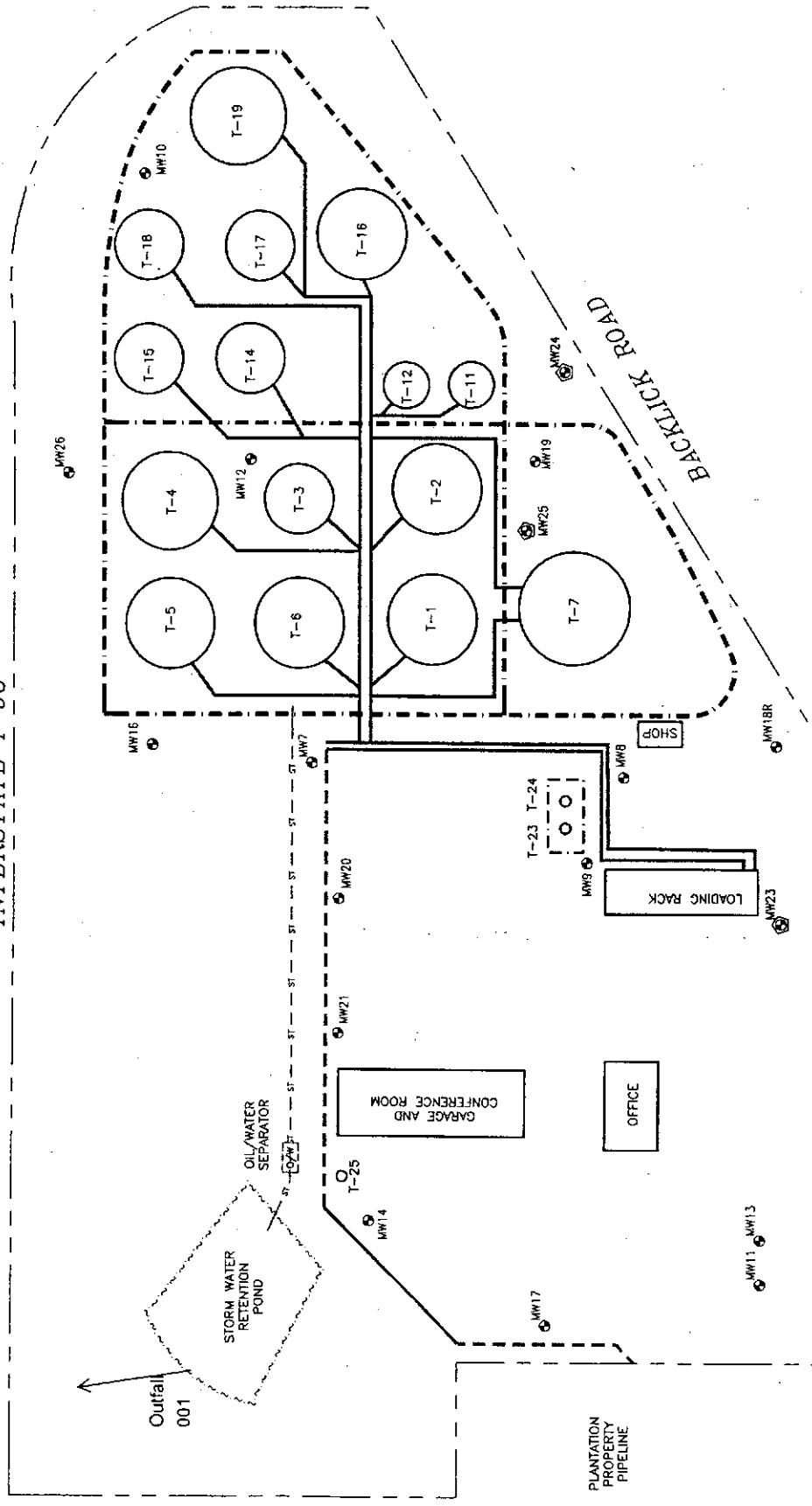
Permit Reviewer's Name : Susan Mackert

Phone Number: (703) 583-3853

Date: May 17, 2013



INTERSTATE I-95



DESIGNED BY: W.A.W. (N.J.)	SITE MAP
CHECKED BY: M.N.	KINDER MORGAN ENERGY PARTNERS 8200 TERMINAL ROAD NEWINGTON, VIRGINIA
REVIEWED BY: A.H.	Groundwater & Environmental Services, Inc. 23 SOUTH 13TH STREET, SUITE 103, RICHMOND, VA 23219
NORTH	SCALE IN FEET (APPROXIMATE)
0 120	DATE 6-9-11
	FIGURE 1

LEGEND

- PROPERTY BOUNDARY
- CONTAINMENT DIKE
- ABOVE GROUND PLANTATION PRODUCT PIPING
- BELOW GROUND PLANTATION PRODUCT PIPING
- OIL/WATER SEPARATOR
- MONITORING WELL
- EARLY DETECTION MONITORING WELL
- TANK FIELD RUN OFF



MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court

Woodbridge, VA 22193

SUBJECT: Reissuance Site Visit
Kinder Morgan Newington 1 Terminal (VA0001945)

TO: Permit Reissuance File

FROM: Susan Mackert

DATE: April 23, 2013

General Site Observations

A reissuance site visit was performed on April 10, 2013. The Kinder Morgan Newington 1 Terminal is an existing petroleum product distribution facility. Fuel products are received via the Plantation Pipeline, stored in above ground storage tanks (ASTs) located within the bermed area of the property, and distributed by truck to offsite retail stations. Jet fuel is provided to Washington Dulles and Reagan National Airports via underground pipelines. Ethanol and additives are also stored on site.

Potentially contaminated storm water and any process wastewater from the site are directed to the facility's oil-water separator (photo 1). A description of potential sources is provided below. The oil-water separator has a design flow rate of 0.220 MGD and a capacity of 12,000 gallons. Any petroleum products removed from the separator are stored in an adjacent AST (photo 2). The discharge from the oil-water separator flows over riprap (photo 3) into a storm water management pond with a design storage capacity of 0.6 MGD (photo 4).

There are two discharge pipes from the storm water management pond. The 18 inch "northern" pipe is designated as Outfall 001(photo 5) which discharges to an unnamed tributary to Accotink Creek (photos 6 - 7). It is staff's best professional judgement that with this reissuance the second, or "southern" pipe, be recognized within the permit and authorized as a point source discharge (photo 8). It is unlikely that there would be a discharge from this outfall. However, if there were a discharge it would be comprised of storm water overflow from the storm water management pond due to a significant rain event. As such, this outfall shall be designated as Outfall 901 and be deemed an emergency storm water outfall. Any discharge would be to an unnamed tributary to Accotink Creek.

AST Area

The ASTs are located within three separate diked areas. Storm water collects via gravity to the lowest point (photo 9) and is visually inspected prior to being pumped to the oil-water separator. Inline hydrocarbon detectors are utilized; the sump pumps will shut off automatically if hydrocarbons are detected in the storm water. The sump pumps are not used while the facility is receiving product.

Loading Rack

The rack has eight loading bays with an area for ethanol fueling recently added (photo 10). Ethanol is received via truck and is off loaded in a separate area from the fuel loading rack (photo 11). Wash water and any spills drain to the oil-water separator. The loading rack is equipped with a fire suppression system. This system requires regular testing, but foam is omitted for the tests. Water generated from the testing is piped to the oil-water separator.

Truck Washing

During the site visit washing of transport trucks was taking place. Wash water is to be contained by a boom (photo 12), collected by a vacuum truck (photo 13) and hauled off site for treatment and disposal. A small flow was noted entering a storm drain within the area of the washing activities (photo 14). It is now against Kinder Morgan's policy to conduct vehicle washing on the property. Vehicle washing is to be conducted at offsite facilities.

Paved Areas

Parking lots and vehicle traffic areas are all paved. Storm water runoff is piped to the oil-water separator.

Maintenance Shop

A maintenance shop is located on site and is leased to a tenant of Kinder Morgan. Open floor drains in the maintenance shop are connected to the oil-water separator. A locked sump pump moves water to the oil-water separator when necessary. Movement of water is only authorized after inspection by Kinder Morgan staff.

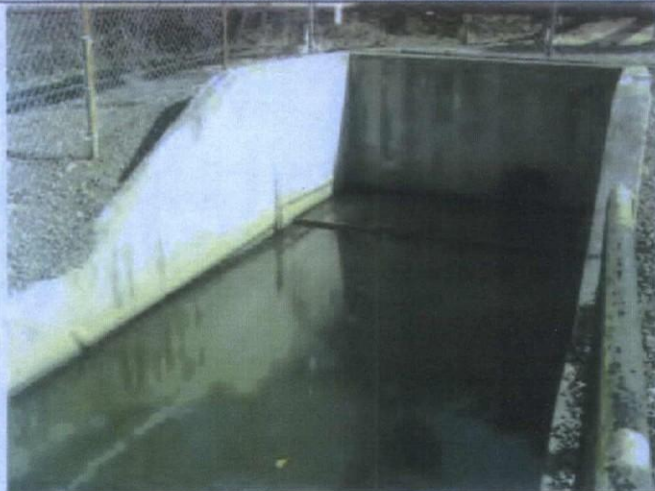


Photo 1. Oil-water separator.



Photo 2. AST adjacent to oil-water separator.



Photo 3. Discharge point from oil-water separator. Flow is in the direction of the arrow.



Photo 4. Storm water management pond.



Photo 5. Outfall 001.



Photo 6. Combined with photo 7 shows the discharge path from Outfall 001. Flow is in the direction of the arrow.



Photo 7. Combined with photo 6 shows the discharge path from Outfall 001. Flow is in the direction of the arrow.



Photo 8. The arrow denotes the location of Outfall 901.

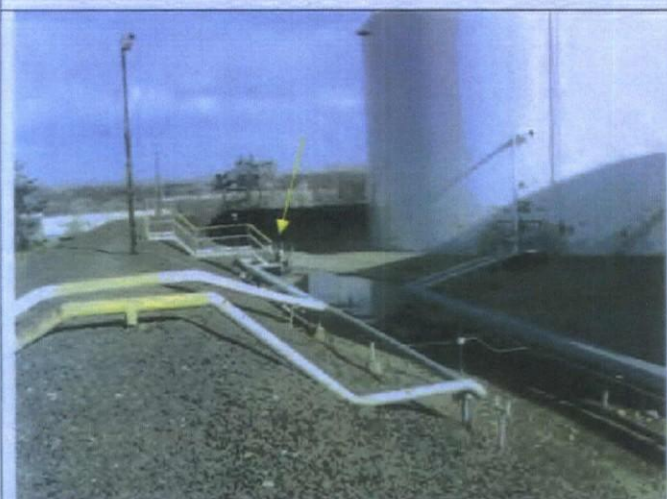


Photo 9. The arrow denotes the location of the storm water collection point within the tank farm area.



Photo 10. Loading rack.



Photo 11. Ethanol off loading area.



Photo 12. Boomer used to contain wash water flow.



Photo 13. Wash water collection.

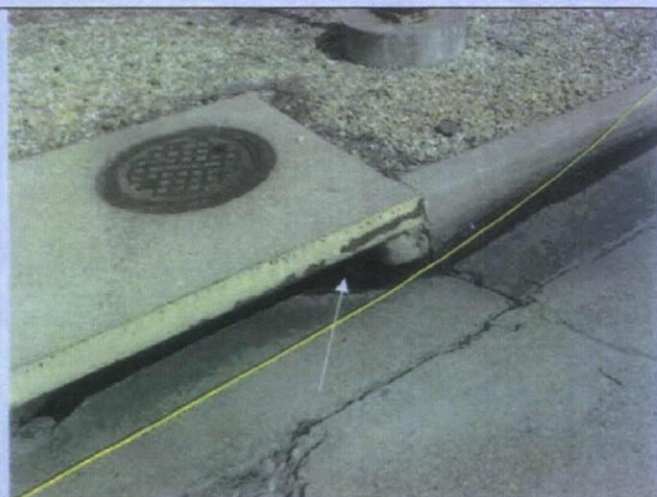


Photo 14. The arrow points to the small flow to the storm water drain from transport vehicle washing.

Mackert, Susan (DEQ)

From: Conaway, Katie (DEQ)
Sent: Wednesday, March 20, 2013 2:52 PM
To: Mackert, Susan (DEQ)
Cc: Thomas, Bryant (DEQ); Carlson, Jennifer (DEQ)
Subject: Permit Planning Statement for Kinder Morgan - Newington (VA0001945)
Attachments: Kinder Morgan - VA0001945 Permit Planning Statement.docx

Hi Susan,

Attached is the permit planning statement for Kinder Morgan (VA0001945). If you have any questions, please let me know.

This planning statement was done using the premise that because of the Accotink Benthic TMDL court case decision, the TMDL has not been completed and the key stressor is yet to be identified. If that needs to change, let me know and I'll update the planning statement.

Thanks,

Katie

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To: Susan Mackert
From: Katie Conaway
Date: March 20, 2013
Subject: Planning Statement for Kinder Morgan Southeast Terminals – Newington 1
Permit Number: VA0001945

Information for Outfall 001:

Discharge Type: Industrial process water and storm water
Discharge Flow: 0.176 MGS (intermittent)
Receiving Stream: UT to Accotink Creek
Latitude / Longitude: 38° 44' 9" / -77° 11' 35"
Rivermile: 0.35
Streamcode: 1aXIG
Waterbody: VAN-A15R
Water Quality Standards: Class III, Section 7, special stds. b.
Drainage Area: 0.036 mi²

1. Please provide water quality monitoring information for the receiving stream segment. If there is no monitoring information for the receiving stream segment, please provide information on the nearest downstream monitoring station, including how far downstream the monitoring station is from the outfall.

This facility discharges to an Unnamed Tributary to Accotink Creek (1aXIG). There is no monitoring data for the Unnamed Tributary. The nearest downstream DEQ monitoring station with ambient data is Station 1aACO006.10, located on Accotink Creek at the Alban Road (Route 790) bridge crossing. Station 1aACO006.10 is located approximately 1.12 rivermiles downstream from Outfall 001. The following is a monitoring summary for this segment of Accotink Creek, as taken from the Draft 2012 Integrated Assessment:

Class III, Section 7, special stds. b.

DEQ ambient water quality monitoring stations 1aACO002.50, at Route 1, 1aACO004.84, at Route 611 (Telegraph Road), and 1aACO006.10, at Route 790, and biological monitoring station 1aACO009.14, upstream of Route 636 and Fairfax County Parkway.

The fish consumption use is assessed as not supporting due to data collected previously at DEQ's fish tissue/sediment station 1aACO004.86, at Route 611. Fish tissue data revealed exceedances of the water quality criterion based tissue value (TV) of 20 parts per billion (ppb) for polychlorinated biphenyls (PCBs) in fish tissue were recorded in tissue from 3 species of fish (American eel, redbreast sunfish and rainbow trout) in 2004. Also, at station 1aACO002.50 in 2005, SPMD data revealed an exceedance of the human health criteria of 0.64 parts per billion (ppb) polychlorinated biphenyls (PCBs), which is noted by an observed effect. Additionally, exceedances of the water quality criterion based tissue value (TV) for heptachlor epoxide and dieldrin were also noted by observed effects for the 2008 assessment. These observed effects will remain.

E. coli monitoring finds a bacterial impairment, resulting in an impaired classification for the recreation use. A bacteria TMDL has been completed and EPA approved for this segment.

Biological monitoring finds benthic macroinvertebrate impairments, resulting in an impaired classification for the aquatic life use.

The recreation and wildlife uses are considered fully supporting.

* Virginia's Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently awaiting final approval.

2. Does this facility discharge to a stream segment on the 303(d) list? If yes, please fill out Table A.

No.

3. Are there any downstream 303(d) listed impairments that are relevant to this discharge? If yes, please fill out Table B.

Table B. Information on Downstream 303(d) Impairments and TMDLs

Waterbody Name	Impaired Use	Cause	Distance From Outfalls	TMDL completed	WLA	Basis for WLA	TMDL Schedule
Impairment Information in the Draft* 2012 Integrated Report							
Accotink Creek	Fish Consumption	PCBS	0.35 miles	No	NA	NA	2022
	Recreation	<i>E. coli</i>	0.35 miles	Yes	No	NA	TMDL Completed in 2008
	Aquatic Life: Benthic Macroinvertebrates	TBD	0.35 miles	No	NA	NA	TBD

* Virginia's Draft 2012 Integrated Report (IR) has been through the public comment period and reviewed by EPA. The 2012 IR is currently awaiting final approval.

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

There is a completed downstream TMDL for the aquatic life use impairment for the Chesapeake Bay. However, the Bay TMDL and the WLAs contained within the TMDL are not addressed in this planning statement.

A portion of Accotink Creek is listed as impaired for PBCs in Fish Tissue. A PCB TMDL for Accotink Creek is scheduled for development in 2022. While there is a downstream PCB impairment, the planning staff does not feel that it is necessary to have this facility perform PCB monitoring. The SIC code for this facility (4226) is not listed in PCB Guidance Memo 09-2001 as being a facility that is subject to monitoring requirements.

5. Fact Sheet Requirements – Please provide information regarding any drinking water intakes located within a 5 mile radius of the discharge point.

There are no public water supply intakes located within 5 miles of this discharge.

FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Kinder Morgan Newington 1

Permit No.: VA0001945

Receiving Stream: UT to Accotink Creek

Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information		Stream Flows		Mixing Information		Effluent Information	
Mean Hardness (as CaCO3) =	mg/L	1Q10 (Annual) =	0 MGD	Annual - 1Q10 Mix =	100 %	Mean Hardness (as CaCO3) =	50 mg/L
90% Temperature (Annual) =	deg C	7Q10 (Annual) =	0 MGD	- 7Q10 Mix =	100 %	90% Temp (Annual) =	25 deg C
90% Temperature (Wet season) =	deg C	30Q10 (Annual) =	0 MGD	- 30Q10 Mix =	100 %	90% Temp (Wet season) =	deg C
90% Maximum pH =	SU	1Q10 (Wet season) =	0 MGD	Wet Season - 1Q10 Mix =	100 %	90% Maximum pH =	8.52 SU
10% Maximum pH =	SU	30Q10 (Wet season) =	0 MGD	- 30Q10 Mix =	100 %	10% Maximum pH =	SU
Tier Designation (1 or 2) =	1	30Q5 =	0 MGD			Discharge Flow =	0.176 MGD
Public Water Supply (PWS) Y/N? =	n	Harmonic Mean =	0 MGD				
Trout Present Y/N? =	n						
Early Life Stages Present Y/N? =	y						

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Acenaphthene	0	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	--	--	--	--	na	9.9E+02
Acrolein	0	--	--	na	9.3E+00	--	--	na	9.3E+00	--	--	--	--	--	--	--	--	--	--	na	9.3E+00
Acrylonitrile ^C	0	--	--	na	2.5E+00	--	--	na	2.5E+00	--	--	--	--	--	--	--	--	--	--	na	2.5E+00
Aldrin ^C	0	3.0E+00	--	na	5.0E-04	3.0E+00	--	na	5.0E-04	--	--	--	--	--	--	--	--	3.0E+00	--	na	5.0E-04
Ammonia-N (mg/l) (Yearly)	0	3.08E+00	5.36E-01	na	--	3.08E+00	5.36E-01	na	--	--	--	--	--	--	--	--	--	3.08E+00	5.36E-01	na	--
Ammonia-N (mg/l) (High Flow)	0	3.08E+00	1.05E+00	na	--	3.08E+00	1.05E+00	na	--	--	--	--	--	--	--	--	--	3.08E+00	1.05E+00	na	--
Anthracene	0	--	--	na	4.0E+04	--	--	na	4.0E+04	--	--	--	--	--	--	--	--	--	--	na	4.0E+04
Antimony	0	--	--	na	6.4E+02	--	--	na	6.4E+02	--	--	--	--	--	--	--	--	--	--	na	6.4E+02
Arsenic	0	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	3.4E+02	1.5E+02	na	--
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Benzene ^C	0	--	--	na	5.1E+02	--	--	na	5.1E+02	--	--	--	--	--	--	--	--	--	--	na	5.1E+02
Benzidine ^C	0	--	--	na	2.0E-03	--	--	na	2.0E-03	--	--	--	--	--	--	--	--	--	--	na	2.0E-03
Benzo (a) anthracene ^C	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (b) fluoranthene ^C	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (k) fluoranthene ^C	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Benzo (a) pyrene ^C	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Bis(2-Chloroethyl) Ether ^C	0	--	--	na	5.3E+00	--	--	na	5.3E+00	--	--	--	--	--	--	--	--	--	--	na	5.3E+00
Bis(2-Chloroisopropyl) Ether ^C	0	--	--	na	6.5E+04	--	--	na	6.5E+04	--	--	--	--	--	--	--	--	--	--	na	6.5E+04
Bis 2-Ethylhexyl Phthalate ^C	0	--	--	na	2.2E+01	--	--	na	2.2E+01	--	--	--	--	--	--	--	--	--	--	na	2.2E+01
Bromoform ^C	0	--	--	na	1.4E+03	--	--	na	1.4E+03	--	--	--	--	--	--	--	--	--	--	na	1.4E+03
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	--	--	--	--	na	1.9E+03
Cadmium	0	1.8E+00	6.6E-01	na	--	1.8E+00	6.6E-01	na	--	--	--	--	--	--	--	--	--	1.8E+00	6.6E-01	na	--
Carbon Tetrachloride ^C	0	--	--	na	1.6E+01	--	--	na	1.6E+01	--	--	--	--	--	--	--	--	--	--	na	1.6E+01
Chlordane ^C	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.3E-03	na	8.1E-03	--	--	--	--	--	--	--	--	2.4E+00	4.3E-03	na	8.1E-03
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	8.6E+05	2.3E+05	na	--
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.9E+01	1.1E+01	na	--
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	--	--	na	1.6E+03

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Chlorodibromomethane ^C	0	--	--	na	1.3E+02	--	--	na	1.3E+02	--	--	--	--	--	--	--	--	--	--	na	1.3E+02
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	na	1.1E+04
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	1.6E+03	--	--	--	--	--	--	--	--	--	--	na	1.6E+03
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.1E-02	na	--
Chromium III	0	3.2E+02	4.2E+01	na	--	3.2E+02	4.2E+01	na	--	--	--	--	--	--	--	--	--	3.2E+02	4.2E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene ^C	0	--	--	na	1.8E-02	--	--	na	1.8E-02	--	--	--	--	--	--	--	--	--	--	na	1.8E-02
Copper	0	7.0E+00	5.0E+00	na	--	7.0E+00	5.0E+00	na	--	--	--	--	--	--	--	--	--	7.0E+00	5.0E+00	na	--
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.2E+00	na	1.6E+04	--	--	--	--	--	--	--	--	2.2E+01	5.2E+00	na	1.6E+04
DDD ^C	0	--	--	na	3.1E-03	--	--	na	3.1E-03	--	--	--	--	--	--	--	--	--	--	na	3.1E-03
DDE ^C	0	--	--	na	2.2E-03	--	--	na	2.2E-03	--	--	--	--	--	--	--	--	--	--	na	2.2E-03
DDT ^C	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	2.2E-03	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	2.2E-03
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	--	--	--	--	1.7E-01	1.7E-01	na	--
Dibenz(a,h)anthracene ^C	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	1.3E+03	--	--	--	--	--	--	--	--	--	--	na	1.3E+03
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	9.6E+02	--	--	--	--	--	--	--	--	--	--	na	9.6E+02
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	1.9E+02	--	--	--	--	--	--	--	--	--	--	na	1.9E+02
3,3-Dichlorobenzidine ^C	0	--	--	na	2.8E-01	--	--	na	2.8E-01	--	--	--	--	--	--	--	--	--	--	na	2.8E-01
Dichlorobromomethane ^C	0	--	--	na	1.7E+02	--	--	na	1.7E+02	--	--	--	--	--	--	--	--	--	--	na	1.7E+02
1,2-Dichloroethane ^C	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	--	--	--	--	na	3.7E+02
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	7.1E+03	--	--	--	--	--	--	--	--	--	--	na	7.1E+03
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.0E+04	--	--	--	--	--	--	--	--	--	--	na	1.0E+04
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	--	--	--	--	na	2.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane ^C	0	--	--	na	1.5E+02	--	--	na	1.5E+02	--	--	--	--	--	--	--	--	--	--	na	1.5E+02
1,3-Dichloropropene ^C	0	--	--	na	2.1E+02	--	--	na	2.1E+02	--	--	--	--	--	--	--	--	--	--	na	2.1E+02
Dieldrin ^C	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.6E-02	na	5.4E-04	--	--	--	--	--	--	--	--	2.4E-01	5.6E-02	na	5.4E-04
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	4.4E+04	--	--	--	--	--	--	--	--	--	--	na	4.4E+04
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	8.5E+02	--	--	--	--	--	--	--	--	--	--	na	8.5E+02
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.1E+06	--	--	--	--	--	--	--	--	--	--	na	1.1E+06
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	4.5E+03	--	--	--	--	--	--	--	--	--	--	na	4.5E+03
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	2.8E+02	--	--	--	--	--	--	--	--	--	--	na	2.8E+02
2,4-Dinitrotoluene ^C	0	--	--	na	3.4E+01	--	--	na	3.4E+01	--	--	--	--	--	--	--	--	--	--	na	3.4E+01
Dioxin 2,3,7,8- tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	5.1E-08	--	--	--	--	--	--	--	--	--	--	na	5.1E-08
1,2-Diphenylhydrazine ^C	0	--	--	na	2.0E+00	--	--	na	2.0E+00	--	--	--	--	--	--	--	--	--	--	na	2.0E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.6E-02	na	8.9E+01	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	8.9E+01
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.6E-02	--	--	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	--	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.6E-02	na	6.0E-02	--	--	--	--	--	--	--	--	8.6E-02	3.6E-02	na	6.0E-02
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	3.0E-01	--	--	--	--	--	--	--	--	--	--	na	3.0E-01

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	2.1E+03	--	--	--	--	--	--	--	--	--	--	na	2.1E+03
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	1.4E+02	--	--	--	--	--	--	--	--	--	--	na	1.4E+02
Fluorene	0	--	--	na	5.3E+03	--	--	na	5.3E+03	--	--	--	--	--	--	--	--	--	--	na	5.3E+03
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	--	1.0E-02	na	--
Heptachlor ^c	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.8E-03	na	7.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	7.9E-04
Heptachlor Epoxide ^c	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.8E-03	na	3.9E-04	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	3.9E-04
Hexachlorobenzene ^c	0	--	--	na	2.9E-03	--	--	na	2.9E-03	--	--	--	--	--	--	--	--	--	--	na	2.9E-03
Hexachlorobutadiene ^c	0	--	--	na	1.8E+02	--	--	na	1.8E+02	--	--	--	--	--	--	--	--	--	--	na	1.8E+02
Hexachlorocyclohexane	0	--	--	na	4.9E-02	--	--	na	4.9E-02	--	--	--	--	--	--	--	--	--	--	na	4.9E-02
Alpha-BHC ^c	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Hexachlorocyclohexane	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Beta-BHC ^c	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Hexachlorocyclohexane	0	--	--	na	1.7E-01	--	--	na	1.7E-01	--	--	--	--	--	--	--	--	--	--	na	1.7E-01
Gamma-BHC ^c (Lindane)	0	9.5E-01	na	na	1.8E+00	9.5E-01	--	na	1.8E+00	--	--	--	--	--	--	--	--	9.5E-01	--	na	1.8E+00
Hexachlorocyclopentadiene	0	--	--	na	1.1E+03	--	--	na	1.1E+03	--	--	--	--	--	--	--	--	--	--	na	1.1E+03
Hexachloroethane ^c	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	--	--	na	3.3E+01
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	--	2.0E+00	na	--
Indeno (1,2,3-cd) pyrene ^c	0	--	--	na	1.8E-01	--	--	na	1.8E-01	--	--	--	--	--	--	--	--	--	--	na	1.8E-01
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Isophorone ^c	0	--	--	na	9.6E+03	--	--	na	9.6E+03	--	--	--	--	--	--	--	--	--	--	na	9.6E+03
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Lead	0	4.9E+01	5.6E+00	na	--	4.9E+01	5.6E+00	na	--	--	--	--	--	--	--	--	--	4.9E+01	5.6E+00	na	--
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Mercury	0	1.4E+00	7.7E-01	--	--	1.4E+00	7.7E-01	--	--	--	--	--	--	--	--	--	--	1.4E+00	7.7E-01	--	--
Methyl Bromide	0	--	--	na	1.5E+03	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	--	--	na	1.5E+03
Methylene Chloride ^c	0	--	--	na	5.9E+03	--	--	na	5.9E+03	--	--	--	--	--	--	--	--	--	--	na	5.9E+03
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	--	3.0E-02	na	--
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Nickel	0	1.0E+02	1.1E+01	na	4.6E+03	1.0E+02	1.1E+01	na	4.6E+03	--	--	--	--	--	--	--	--	1.0E+02	1.1E+01	na	4.6E+03
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Nitrobenzene	0	--	--	na	6.9E+02	--	--	na	6.9E+02	--	--	--	--	--	--	--	--	--	--	na	6.9E+02
N-Nitrosodimethylamine ^c	0	--	--	na	3.0E+01	--	--	na	3.0E+01	--	--	--	--	--	--	--	--	--	--	na	3.0E+01
N-Nitrosodiphenylamine ^c	0	--	--	na	6.0E+01	--	--	na	6.0E+01	--	--	--	--	--	--	--	--	--	--	na	6.0E+01
N-Nitrosodi-n-propylamine ^c	0	--	--	na	5.1E+00	--	--	na	5.1E+00	--	--	--	--	--	--	--	--	--	--	na	5.1E+00
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.6E+00	na	--	--	--	--	--	--	--	--	--	2.8E+01	6.6E+00	na	--
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	6.5E-02	1.3E-02	na	--
PCB Total ^c	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	6.4E-04	--	--	--	--	--	--	--	--	--	1.4E-02	na	6.4E-04
Pentachlorophenol ^c	0	7.7E-03	5.9E-03	na	3.0E+01	7.7E-03	5.9E-03	na	3.0E+01	--	--	--	--	--	--	--	--	7.7E-03	5.9E-03	na	3.0E+01
Phenol	0	--	--	na	8.6E+05	--	--	na	8.6E+05	--	--	--	--	--	--	--	--	--	--	na	8.6E+05
Pyrene	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	--	--	na	4.0E+03
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Gross Alpha Activity	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
(pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Beta and Photon Activity	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
(mrem/yr)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.0E+00	na	4.2E+03	--	--	--	--	--	--	--	--	2.0E+01	5.0E+00	na	4.2E+03
Silver	0	1.0E+00	--	na	--	1.0E+00	--	na	--	--	--	--	--	--	--	--	--	1.0E+00	--	na	--
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,1,2,2-Tetrachloroethane ^C	0	--	--	na	4.0E+01	--	--	na	4.0E+01	--	--	--	--	--	--	--	--	--	--	na	4.0E+01
Tetrachloroethylene ^C	0	--	--	na	3.3E+01	--	--	na	3.3E+01	--	--	--	--	--	--	--	--	--	--	na	3.3E+01
Thallium	0	--	--	na	4.7E-01	--	--	na	4.7E-01	--	--	--	--	--	--	--	--	--	--	na	4.7E-01
Toluene	0	--	--	na	6.0E+03	--	--	na	6.0E+03	--	--	--	--	--	--	--	--	--	--	na	6.0E+03
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Toxaphene ^C	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	2.8E-03	--	--	--	--	--	--	--	--	7.3E-01	2.0E-04	na	2.8E-03
Tributyltin	0	4.6E-01	7.2E-02	na	--	4.6E-01	7.2E-02	na	--	--	--	--	--	--	--	--	--	4.6E-01	7.2E-02	na	--
1,2,4-Trichlorobenzene	0	--	--	na	7.0E+01	--	--	na	7.0E+01	--	--	--	--	--	--	--	--	--	--	na	7.0E+01
1,1,2-Trichloroethane ^C	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	--	--	na	1.6E+02
Trichloroethylene ^C	0	--	--	na	3.0E+02	--	--	na	3.0E+02	--	--	--	--	--	--	--	--	--	--	na	3.0E+02
2,4,6-Trichlorophenol ^C	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	--	--	na	2.4E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Vinyl Chloride ^C	0	--	--	na	2.4E+01	--	--	na	2.4E+01	--	--	--	--	--	--	--	--	--	--	na	2.4E+01
Zinc	0	6.5E+01	6.6E+01	na	2.6E+04	6.5E+01	6.6E+01	na	2.6E+04	--	--	--	--	--	--	--	--	6.5E+01	6.6E+01	na	2.6E+04

Notes:

- All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
Antidegradation WLAs are based upon a complete mix.
Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	6.4E+02
Arsenic	9.0E+01
Barium	na
Cadmium	3.9E-01
Chromium III	2.5E+01
Chromium VI	6.4E+00
Copper	2.8E+00
Iron	na
Lead	3.4E+00
Manganese	na
Mercury	4.6E-01
Nickel	6.8E+00
Selenium	3.0E+00
Silver	4.2E-01
Zinc	2.6E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

VA0001945 Kinder Morgan - Effluent pH Data

Due	Outfall	Parameter Description	Concentration Minimum	Limit Minimum	Concentration Maximum	Limit Maximum	Comments
10/10/08	001	pH (S.U.)	7.07	6.0	7.07	9.0	DMR
1/10/09	001	pH (S.U.)	8.21	6.0	8.21	9.0	DMR
4/10/09	001	pH (S.U.)	8.68	6.0	8.68	9.0	DMR
7/10/09	001	pH (S.U.)	8.52	6.0	8.52	9.0	DMR
10/10/09	001	pH (S.U.)	7.25	6.0	7.25	9.0	DMR
1/10/10	001	pH (S.U.)	8.34	6.0	8.34	9.0	DMR
4/10/10	001	pH (S.U.)	6.58	6.0	6.58	9.0	DMR
7/10/10	001	pH (S.U.)	6.0	6.0	6.0	9.0	DMR
10/10/10	001	pH (S.U.)	6.51	6.0	6.51	9.0	DMR
1/10/11	001	pH (S.U.)	8.12	6.0	8.12	9.0	DMR
4/10/11	001	pH (S.U.)	7.55	6.0	7.55	9.0	DMR
7/10/11	001	pH (S.U.)	6.35	6.0	6.35	9.0	DMR
10/10/11	001	pH (S.U.)	8.28	6.0	8.28	9.0	DMR
1/10/12	001	pH (S.U.)	8.66	6.0	8.66	9.0	DMR
4/10/12	001	pH (S.U.)	7.86	6.0	7.86	9.0	DMR
7/10/12	001	pH (S.U.)	7.32	6.0	7.32	9.0	DMR
10/10/12	001	pH (S.U.)	7.60	6.0	7.60	9.0	DMR
1/10/13	001	pH (S.U.)	6.89	6.0	6.89	9.0	DMR
4/10/13	001	pH (S.U.)	7.36	6.0	7.36	9.0	DMR

90% pH = 8.52 S.U.

*DMR reporting is required on a quarterly basis. The sample due date reflects the pH sample collected during the previous quarter. Because only one sample is required per quarter, only the concentration maximum was used to calculate the 90% pH.

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated industrial wastewater and storm water into a water body in Fairfax County, Virginia.

PUBLIC COMMENT PERIOD: June 27, 2013 to July 26, 2013

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Industrial Wastewater/Storm Water issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Kinder Morgan Southeast Terminals, LLC, 1100 Alderman Drive, Suite 200, Alpharetta, GA 30005, VA0001945

NAME AND ADDRESS OF FACILITY: Kinder Morgan Newington 1 Terminal, 8200 Terminal Road, Newington, VA 22122

PROJECT DESCRIPTION: Kinder Morgan Southeast Terminals, LLC has applied for a reissuance of a permit for the private Kinder Morgan Newington 1 Terminal. The facility proposes to release treated industrial wastewater and storm water at an average rate of 0.176 million gallons per day into an unnamed tributary to Accotink Creek in Fairfax County in the Potomac River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, total suspended solids, total petroleum hydrocarbons, naphthalene, benzene, toluene, ethylbenzene, and total xylenes. Whole effluent toxicity will also be monitored.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by hand-delivery, e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requester, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the draft permit and application at the DEQ-Northern Regional Office by appointment, or may request electronic copies of the draft permit and fact sheet.

Name: Susan Mackert

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193

Phone: (703) 583-3853 E-mail: susan.mackert@deq.virginia.gov Fax: (703) 583-3821